

KSC ENVIRONMENTAL CHECKLIST

1. PROJECT TITLE: _____		PROJECT NO.: _____	
3. PROJECT LOCATION: <input type="checkbox"/> KSC <input type="checkbox"/> CCAFS <input type="checkbox"/> PAFB <input type="checkbox"/> OTHER: _____		4. FACILITY NAME/NO.: _____	
5. REQUESTOR/PROJECT LEAD: _____ ORG/MAIL CODE: _____		6. PHONE NO.: _____	
7. PREPARER OF CHECKLIST: _____ ORG/MAIL CODE: _____		8. PHONE NO.: _____	
9. PROJECT DESCRIPTION: (Provide site plans, maps, etc. as separate attachment(s)) 			
10. a-r. Check the appropriate box (Yes, No, Undetermined) to identify if any component of the proposed project (including, but not limited to construction, installation, demolition, removal, activation or operation) will involve any of the items listed. Use the attached instructions. Provide more specific information for each item marked Yes or Undetermined in the third column.			
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	a. <u>Construction/Modification/Demolition</u> : Constructing, altering, expanding, modifying (other than routine maintenance) or demolishing any building, pavement or structure.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	b. <u>Land Impacts</u> : Land disturbance, soil addition or removal, digging, grading, trenching, alteration or removal of vegetation, equipment/material staging area required, stockpiling and any activity in or near surface water (including ditches and low-lying areas).		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	c. <u>Hazardous Material and Hazardous, Controlled, or Universal Waste</u> : Use, storage, generation and/or disposal of any hazardous or toxic material, petroleum products or paint coatings.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	d. <u>Asbestos Containing Material (ACM)</u> : Disturbance of construction material that may contain asbestos (i.e., roofs, walls, ceilings, floor tile, piping insulation, caulk, etc.).		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	e. <u>PCBs</u> : Disturbance or replacement of electrical distribution systems, communication systems, lightning protection, transformers, non-liquid PCB materials or any other items believed to contain PCBs, including paint coatings.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	f. <u>Painting</u> : Initial application or repainting of a facility (interior or exterior), structure or utility.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	g. <u>Paint, Sealant, Caulking Removal</u> : Includes surface preparation such as sandblasting, scraping, water blasting or chemical stripping of existing paint coatings. Specify method.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	h. <u>Dewatering</u> : Use of conventional wellpoints, hydraulic pumps, or other means to transfer groundwater (including water in utility manholes) for project activities including utility trenching, foundation work, roadbed construction, stormwater treatment pond, and borrow excavation.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	i. <u>Stormwater</u> : Construction of new building, pavement, impervious or semi-impervious surface and/or modification of an existing stormwater system. Give approximate number of square feet of impervious surface being added.	sq. ft.	
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	j. <u>Drinking/FIREX Water</u> : Installation or modification of potable water system. Include diameter of new water piping if known.	inches	
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	k. <u>Domestic/Industrial Wastewater</u> : Installation or modification of domestic sewer system, including septic tank systems, generation of process wastewater or modification to a system that handles or transports wastewater, including condensate lines, washdowns, outfalls, holding ponds and non-point source discharges associated with industrial applications/processes.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	l. <u>Air Emissions</u> : Installation or alteration of a stack, scrubber, exhaust fan, vent, generator, fume hood, cooling tower, boiler, halon fire suppression system, HVAC system, refrigeration system; or discharge from painting or sandblasting. Describe emission source.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	m. <u>Open Burning</u> : Burning of any land clearing debris.		
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	n. <u>Tanks</u> : Construction, modification, or repair of above or underground storage tanks (including piping and/or containment). Type commodity stored and capacity here.	gallons	

<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	o. <u>Transformers/Generators</u> : Installation, replacement or repair of transformers, generators, or any other oil-filled equipment. Give capacity.	gallons
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	p. <u>Exterior Lighting</u> : Installation, refurbishment or modification of exterior lighting.	
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	q. <u>Radiation</u> : Generation of ionizing or non-ionizing radiation or use of any radiation source.	
<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNDETERMINED	r. <u>Other</u> : Please describe any other aspect of the proposed action that could potentially affect the environment. Use separate sheet if necessary.	

ENVIRONMENTAL CHECKLIST PREPARATION INSTRUCTIONS

1. **Project Title:** Title of proposed action as it appears on the work order or programming document.
2. **Project Number:** Insert SON, WON, PCN, DBEH, SXHT, MAXIMO or other authorized work identification number, as appropriate.
3. **Project Location:** Check box for applicable installation where work will be conducted. For off-site work, identify location.
4. **Facility Name/Number:** Use the proper name for the facility where work is being conducted and the assigned facility number. If proposed action is not directly associated with a facility, use the closest facility for reference.
5. **Requestor/Project Lead:** List name of individual who has requested the proposed action. If this individual cannot be identified, or no single individual is responsible for submitting the work requirement, then list the person who is most familiar with the proposed action, such as the design engineer or project lead, and their mail code.
6. **Phone Number:** Telephone number of individual identified in #5
7. **Preparer of Checklist:** List name of individual who completed the checklist and their mail code.
8. **Phone Number:** Telephone number of individual identified in #7.
9. **Project Description:** Provide a brief, complete description of the proposed project. Include size of project and site, proposed uses, and any known plans for the future. Attach additional information including site plans, maps, statement of work, etc.
- 10 a.-r. The items listed in this section could be included in, or result from, the work that is being proposed. To the best of your knowledge, indicate by checking the applicable box if any of these items could be affected by the proposed work. Check the "UNDETERMINED" box if you are not certain. If further information is required to complete items 10 a. - r., please reference the additional instruction sheet.

ENVIRONMENTAL CHECKLIST ADDITIONAL INFORMATION AND INSTRUCTIONS

SECTION 10a. -r.

The following additional information/instructions should be applied to Environmental Checklist Section 10a – r.

- a. **Construction:** Some proposed construction activities may not have their scope defined well enough to allow easy identification of potential environmental concerns, and certain facilities and certain types of construction activities have restrictions or constraints that may not be easily identifiable. An example may be disposal of wastes from a construction or demolition project as opposed to waste generated from normal operations and maintenance (O&M) type projects. Types of waste accepted at the KSC Class III Schwartz Road Landfill are listed on the EPB web page at <http://environmental.ksc.nasa.gov/permitting/wastePermit.htm>. The proposed project must reflect the proper disposal method in the design specifications to ensure compliance with existing permits.
- b. **Land Impacts:** Areas of major environmental concern associated with this item include the loss of vegetation and disturbance of land that may provide habitat for various types of wildlife. Disturbance of the ground could impact burrowing animals, such as the gopher tortoise. Other issues include the disposal of vegetation from land clearing, underground utilities, archaeological sites, wetlands, etc. If your project includes any type of vegetation removal, land clearing, tree trimming (other than routine landscape maintenance), digging, grading or activity in or near wetlands/surface waters, check yes for this item.
- c. **Hazardous Material and Hazardous, Controlled, or Universal Waste:** A number of items have the potential to adversely affect the natural environment. Consequently, use of these items in the construction and/or operation of the proposed project will require special storage, handling and disposal. Hazardous materials usually constitute items that possess any one or more of the following characteristics: corrosive, flammable, toxic and/or reactive. If you are not sure, contact the EPB to determine if hazardous materials may be used in your project. In addition, should hazardous materials be included in your proposed project, the environmental office may be able to identify an acceptable non-hazardous alternative through the Pollution Prevention (P2) program. Wastes generated from use of hazardous materials will generally be classified as hazardous wastes, which require special handling and disposal.
- d. **Asbestos Containing Material (ACM):** Due to the age of many of the buildings and structures on KSC and CCAFS, it is likely that if your project affects an existing facility, ACM may be encountered. If the project involves new construction or is remote from existing structures and/or utilities then it is unlikely that any ACM would be disturbed by your action(s). Many of the existing facilities have already been sampled and the ACM has been identified. Contact the KSC Industrial Hygiene Office at 867-2400 to determine if the project will impact a known ACM source or access the KSC on-line ACM survey database at <http://amis>. If the potential for the presence of ACM exists, sampling must be requested so a determination can be made for all possible sources.
- e. **PCBs:** Polychlorinated biphenyls (PCBs) are chemicals that are primarily found in some types of fluids used in electrical equipment, i.e., electrical transformers, switches, ballasts, etc. Non-liquid PCBs may also be present in older paint coatings, caulking and other materials. Consequently, all projects or jobs that will come in contact with any fluid-filled electrical equipment or non-liquid materials suspected of containing PCBs should include sampling and analysis for PCBs. A current analysis (within six months) must accompany each fluid-containing piece of electrical equipment requiring disposal.
- f. **Painting:** Painting, depending on the method and contents of the paint, can pose significant human health risks as well as generate hazardous or controlled wastes. Use of paint thinner and chemical stripper typically results in generation of wastes requiring special handling and disposal. If known, please indicate if these painting related materials are to be used. If your project includes any painting check yes for this item and include specific information regarding paint contents, other hazardous materials to be used and painting methodology, as applicable.
- g. **Paint, Sealant, Caulking Removal:** Removal of existing paint coatings, sealants and caulking can generate hazardous or controlled wastes. In some cases, old paint coatings containing lead and/or other metals as well as non-liquid PCBs will require specific abatement procedures and special disposal of wastes generated. If your project includes any paint, sealant, or caulking removal activities check yes for this item and include specific information regarding paint contents, other hazardous materials to be used, and paint or sealant removal methodology.
- h. **Dewatering:** If the proposed project will require the pumping of water to support construction activities, a permit may be required. There are a number of variances and quantity thresholds based upon the amount of water being transferred and the area where the water will be discharged. Therefore, if your project requires dewatering, check yes and the EPB will determine permit applicability.

- i. **Stormwater:** Stormwater, i.e., rain, is an environmental concern primarily due to potential impacts of rainwater run off from an impervious surface into the surrounding area. Secondly, an impervious surface prevents stormwater from percolating into the ground. Consequently, the St. Johns River Water Management District (SJRWMD) requires a permit to be obtained and a stormwater management system to be constructed when a large impervious surface is created. The threshold for obtaining a permit varies from 4000 square feet for surfaces specifically supporting vehicular traffic, such as roads, parking lots, stabilized areas, etc., to 9000 square feet for buildings inclusive of all other impervious surfaces. The permit threshold can also be “tripped” by adding to or modifying an existing impervious surface, so do not assume the project will not require permitting if new impervious area is below the above thresholds. If you check “yes”, please identify the number of square feet involved.
- j. **Drinking/FIREX Water:** Check yes if the proposed project involves work that would affect a potable water line. Environmental concerns with work that affects water lines are: 1. The disturbance of a water line typically lowers water quality and therefore, requires disinfection and sampling prior to use; 2. Some connections and/or additions to the existing water system require a permit. Supply as much design information as possible relating to potable water system changes (e.g., new vs. extension, pipe diameter, etc.). Permit determinations and applications will be handled by the Environmental Program Branch (EPB).
- k. **Domestic Wastewater/ Industrial Wastewater:** Environmental concerns include potential impacts to the operation of the Wastewater Treatment Plant and Florida Department of Environmental Protection (FDEP) permit conditions. New connections and septic tank installations may require permitting, inspection, and/or certification. Therefore, check yes if the proposed project will involve installation of new wastewater sources or in any way effect the existing sanitary sewer system. Industrial wastewater is any water-based waste stream, discharge, wash water, deluge outfall, etc., that would result from conducting an industrial-type operation. The source of this wastewater typically requires permitting and therefore, must be identified to the environmental office as soon as possible. In addition, early environmental coordination could result in the identification of a process alternative that may preclude or minimize the waste stream.
- l. **Air Emissions:** If the project (either during construction or operation) would discharge any substance into the air, other than vehicular or normal construction equipment exhaust, check yes and describe the source of the emission. Some emission sources may require State and/or Federal permitting for both construction and operation.
- m. **Open Burning:** If any land clearing debris will be burned during construction, check yes. The Florida Department of Forestry requires notification in accordance with FAC 51-2 Open Burning. coordination with the KSC Fire Marshall is also required
- n. **Tanks:** Any vessel that stores liquids, other than drinking water, must be evaluated for potential environmental effects. Some tanks require registration with the State based upon the quantity and type of material being stored. All tanks must be identified in the tank management program and various containment and piping requirements may apply. If you suspect the involvement of any new or existing tanks, including associated piping or containment, check yes and the environmental tank program managers will identify any regulatory requirements.
- o. **Transformers/Generators:** If any oil-filled equipment is to be modified, replaced or installed, check yes. There are specific handling, removal and waste disposal guidelines to follow as well as Spill Prevention, Control and Countermeasures (SPCC) requirements to be met.
- p. **Exterior Lighting:** Exterior lights at or near Atlantic coastal beaches in Florida have been proven to disrupt sea turtle nesting. Consequently, NASA has developed exterior lighting policies to minimize adverse impacts to threatened and endangered sea turtles that nest KSC beaches. Should the project include exterior lights, either new or replacement of existing, check yes and the EPB will monitor the design of your project to ensure compliance with the applicable policies. Typically, exterior lights that are not directly related to a color rendition or explosion proof requirement will be the lowest wattage, low pressure sodium fixtures that meet the needs of your request. Exterior lighting requirements are located on the EPB web page at:
<http://environmental.ksc.nasa.gov/projects/documents/ExteriorLightingGuidelines.pdf>.
- q. **Radiation:** Various types of mission related equipment have the potential to emit radiation that could affect human health and the well being of other living organisms. Typically, the project/job requestor is aware of the dangers associated with the equipment being constructed, installed or worked on. However, in some cases, work may be requested that would take place within a zone of influence for an existing piece of equipment, thereby requiring shut-down or some other operational constraint. Therefore, if you know the project will involve a radiation source, or is in the vicinity of a potential source of radiation (radar, microwave transmitter, etc.) check yes.
- r. **Other:** If aspects of the proposed project do not fit into any of the above categories, but may have an effect on the natural environment, explain in the space provided. This space should also be used to explain or identify specific aspects of the above items, as necessary. If there is not enough space to adequately explain the item you are describing, please attach an additional sheet and reference a continuation sheet in case they should become separated.